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TWO UNDESCRIBED SYRPHID FLIES FROM NEW ENGLAND.

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Platychirus varipes, new species.

Allied to P. podagratus Zetterstedt of Europe, but without any long twisted hairs at the base of the front femora and with the front tibiae a little more gradually dilated.

Male.—Length, 8.5 mm. Face and front aeneous, thinly covered with whitish dust, the tubercle and oral margin black. In profile the face is long concave above, shortly concave below the nose-shaped tubercle; the base of the antennae and the tip of the oral margin are on the same plane, the tubercle occupying over one-third the length of the face and markedly prominent; pile black. Front rather broad, not swollen. Sides of the vertical triangle almost equilateral, the triangle bluish, with black pile except at the vertex. Occiput bluish black, densely grayish pollinose along the orbits except at the vertex. Occiput bluish black, densely grayish pollinose along the orbits except above; the pile yellow, short; the occipital ciliae long, black. Antennae black, just a trace of reddish on the third joint at the base below; third joint one and one-half times as long as wide, gently concave on upper surface, convex apically and ventrally. Thorax aeneous, with tawny-yellowish pile, some black hairs sub-laterally on the posterior half. Scutellum concolorous with the mesonotum, with longer black pile but some pale hairs intermixed, especially basally.

Legs black, the hind knees narrowly yellow; middle knees, apex of the middle tibiae and the first two joints of their tarsi, reddish yellow. Front legs reddish yellow, their femora with a broad brownish stripe posteriorly and a narrower one anteriorly. Perhaps sometimes these stripes are more extensive and the femora chiefly shining brown except the broad base and apex. Posterior half of front tibiae black on the outer side for more than half their length, the base yellow; front basitarsi over half white. Front femora with long, moderately abundant, rather stout black hairs behind, about three of them stronger than the rest. The front tibiae are gradually dilated from the base to the apical fourth, thence to the apex strongly dilated, the anterior margin almost straight, the outer apex produced as a small triangle. The front basitarsus is almost as wide as the apex of the tibia, its posterior basal corner oblique where it receives the tibial projection, one and one-fifth times as long as wide; the following joints gradually and rather sharply decreasing in width and length but the last joint as long as the third. Middle femora with long black pile behind and on postero-ventral surface, their tibiae with conspicuous, rather abundant, fine

yellow pile on both the anterior and posterior surfaces. Hind femora with long yellowish and blackish pile in front, their tibiae wholly black pilose.
Wings tinged with luteous; stigma luteous. Squamae whitish with fuscous

border and pallid-yellowish fringe. Halteres fuscous.

Abdomen opaque black, the side margins and lateral spots on each segment metallic greenish, the first segment wholly of this color. The shining side margins are dilated on the basal two-thirds of the second segment to occupy one-fifth the width of the segment on either side; sub-basally on the basal third or less of the two following segments and over three-fourths of the fifth segment, the shining margin is dilated to occupy more than one-third the width on either side, its posterior margin oblique, the inner half of the fasciae thus formed on the third and fourth segments covered with heavy bloom. Pile rather sparse, yellowish on the metallic areas and base of the abdomen; elsewhere shorter, sub-appressed, black.

Holotype, &, Fort Kent, Maine, August 17, collected by Charles W. Johnson; in the Museum of the Boston Society of Natural History.

Stenosyrphus vittifacies, new species.

Belongs to the sodalis group (for definition of this group and key to species, see Canadian Entomol., vol. 55, p. 59, 1923). The black facial stripe brings it close to S. nigrifacies Curran; the abdominal spots, which do not reach the side margins, ally it with S. contumax Osten Sacken. The spots are not or are scarcely concave in front and the species does not, in this respect, agree with the other members of the group.

Male.—Length, between 9 and 10 mm. Face broadly yellow on the sides and narrowly across immediately below the antennae; the cheeks, very broad oral border and middle stripe, shining black, the median stripe elongate triangular, reaching nearly to the base of the antennae as an acute point; the yellow ground is covered by grayish pollen, which also encroaches on the black ground. Jowls more brownish. Pile moderately long, fairly abundant, black. Frontal triangle black, densely gray pollinose so that the ground color is mostly obscured; narrowly bare immediately above the antennae where it forms a broad, poorly formed W; pile black. Vertical triangle greenish black, thinly grayish-yellow pollinose, its pile black. Occiput densely grayish pollinose, clothed with pale-yellowish pile, the orbital ciliae black. Antennae black; third joint obtusely oval, one and one-fourth times as long as broad, widest sub-apically. Arista as long as the antenna, thickened on the basal third, wholly black. Eyes touching for a distance equal to the length of the vertical triangle, thinly short, yellow pilose.

Thorax aeneous, the disk somewhat dull, with several obscure, narrow, more shining vittae; pleura thinly whitish pollinose. Pile moderately long, chiefly yellowish; on the sides of the mesonotum and on the mesopleura above, black, or largely so, the pale pile also appearing tipped with black in some lights. Scutellum reddish yellowish, the base narrowly black, the whole border metallic

blue; the pile long, black, pale and shorter basally.

Legs black, the apices of the femora reddish, the hind ones less broadly so; the base of the posterior tibiae, and the front four tibiae, except obscure brownish bands lying mostly beyond the middle, reddish yellow.

Wings cinereous hyaline, the stigma luteous. Squamae whitish, with yellowish border and fringe. Halteres yellow, the knobs somewhat ferruginous. Abdomen opaque or sub-opaque black, the first segment, sides of the whole

abdomen, apical third of the third segment, apical half of the fourth and the whole of the fifth, shining; first segment brownish. Second segment with a pair of rather small, sub-oval, yellow spots about the middle, well separated from the side margins, the distance between their inner ends equal to about twice the length of one spot. The spots are placed a little obliquely, their outer end nearer the anterior margin of the segment. Second segment with a broad, sub-basal, rather narrowly interrupted reddish fascia, the width of which is equal to about one-third the length of the segment; the outer ends are separated from the side margins, rounded, the front margin of the spot almost straight, the posterior margin gently convex. Fourth segment similarly marked. Apices of the fourth and fifth segments narrowly yellow. The abdominal pile is yellowish on the first segment, basal three-fourths of the second and basal half of the two following; elsewhere black.

Holotype, ♂, Hampton, New Hampshire, April 14, 1905, collected by S. A. Shaw; in the Museum of the Boston Society of Natural History.